

Pain and Addiction: Challenges and Controversies

Mel Pohl, MD, FASAM

Medical Director

Las Vegas Recovery Center

5 Key Facts:

- All pain is real.
- Emotions drive the experience of chronic pain.
- Opioids often make pain worse.
- Treat to improve function.
- Expectations influence outcomes.

Pain Definition

“An unpleasant
sensory and **emotional** experience
associated with actual or potential tissue
damage”

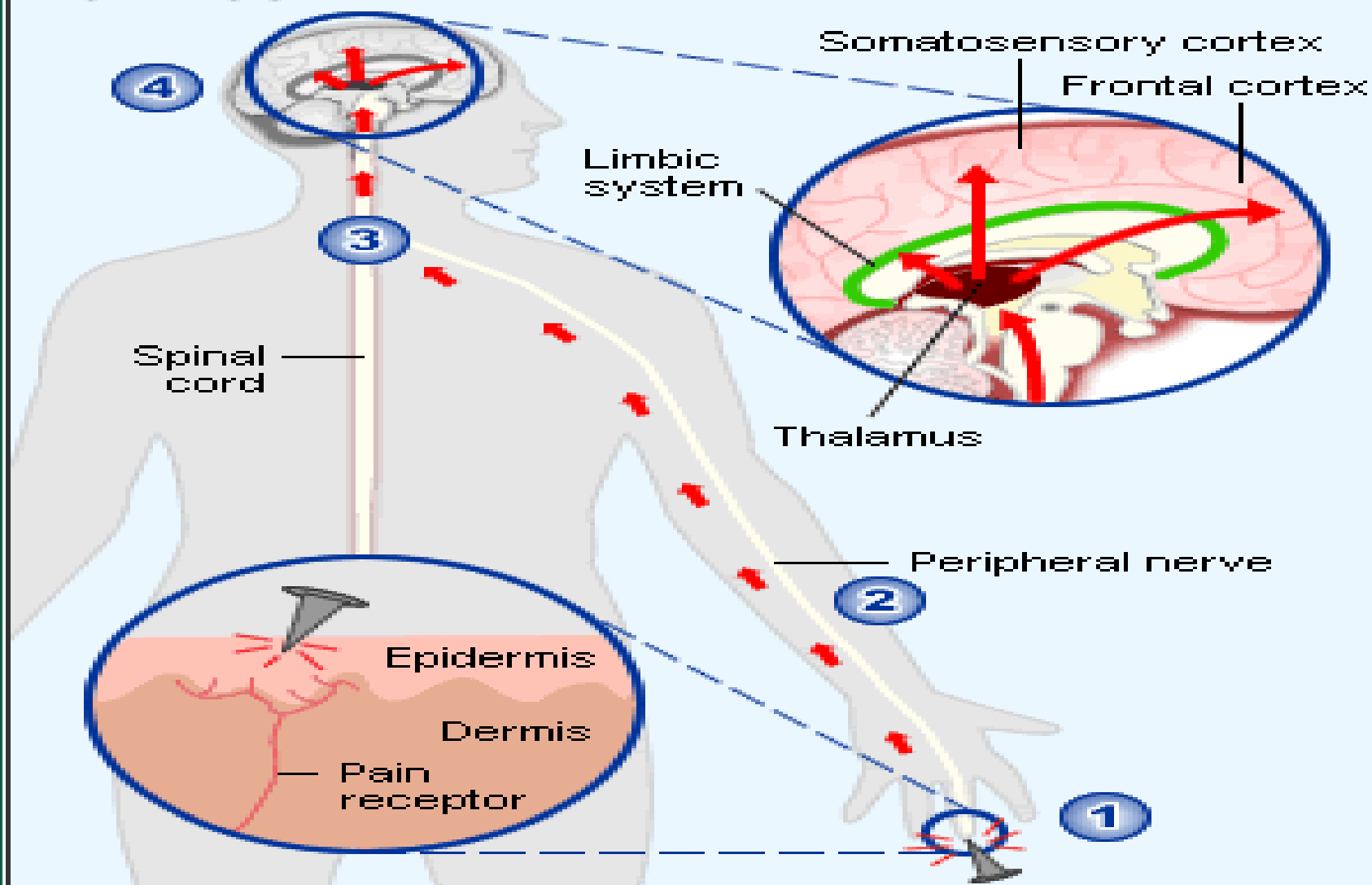
The International Association for the Study of Pain

(Mesky,1979)

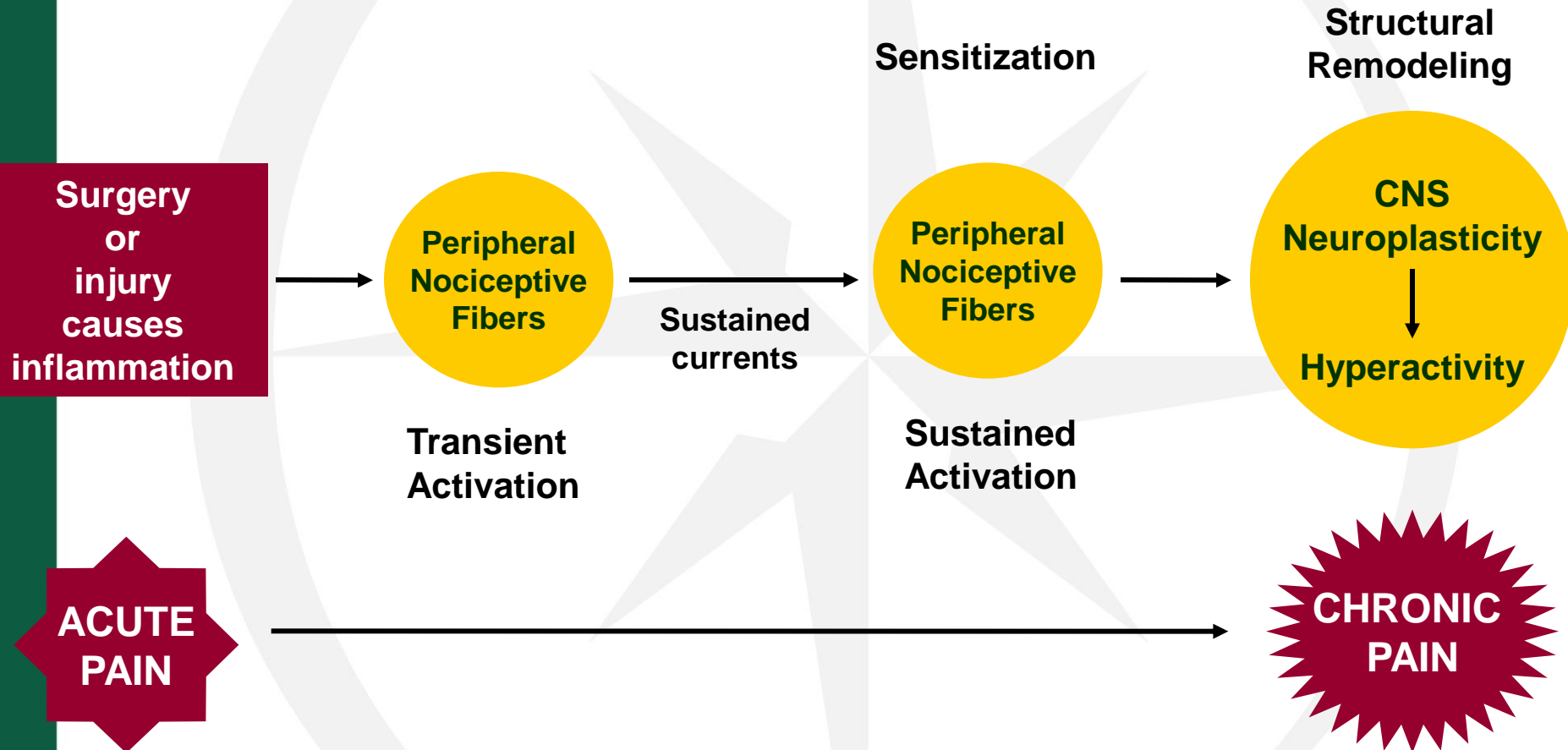
Pain is influenced by:

- Culture
- Context
- Anticipation and previous experience
- Emotional and cognitive factors

HOW YOU FEEL PAIN: THE PAIN PATHWAY

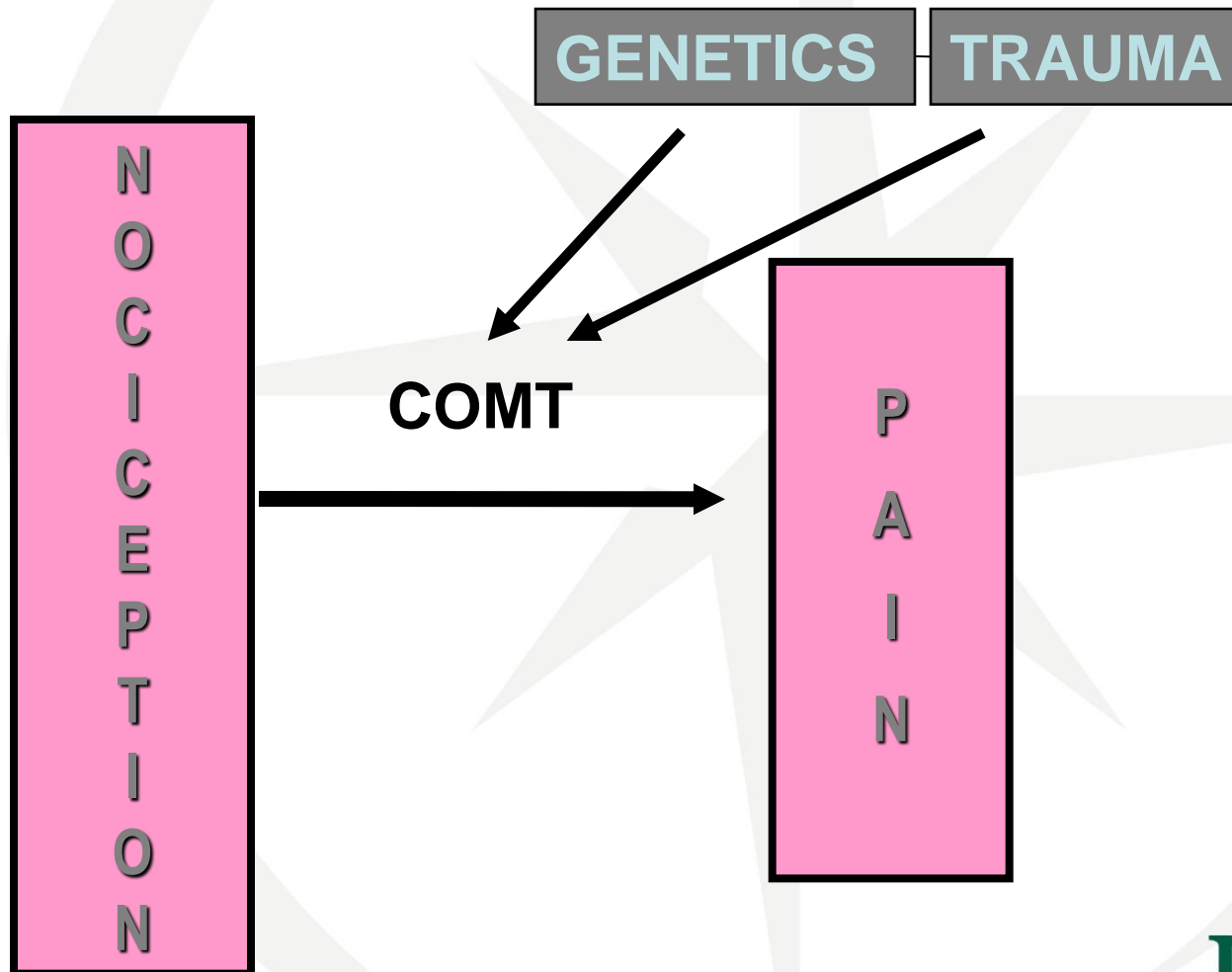


How does acute pain become chronic pain?

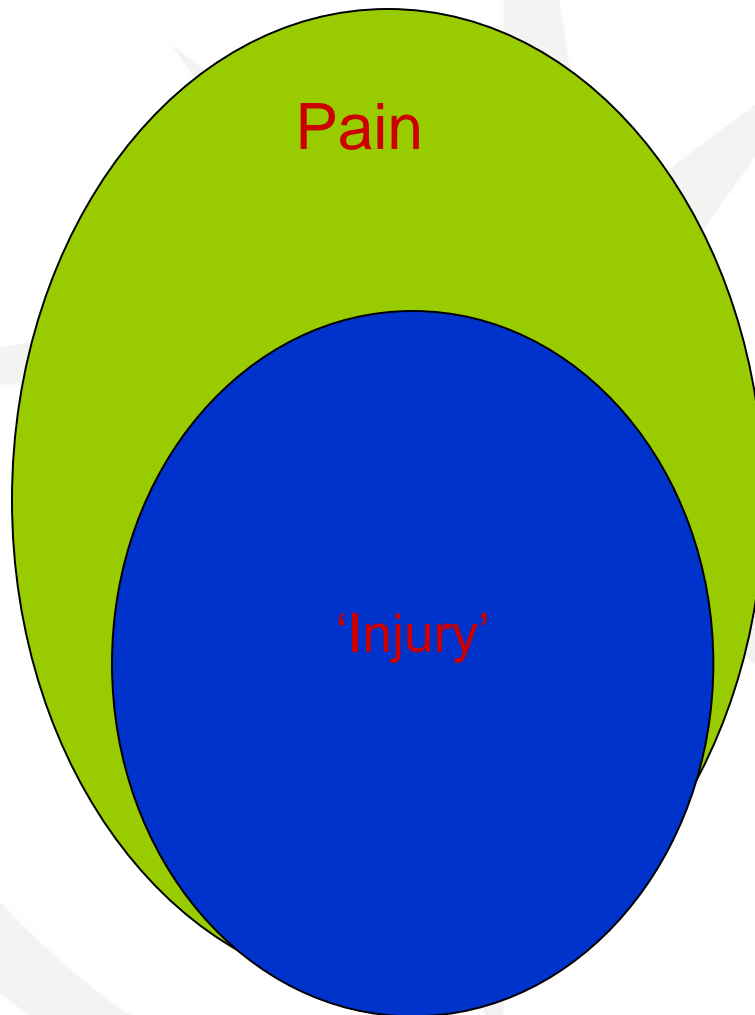


Woolf CJ, et al. *Ann Intern Med.* 2004;140:441-451; Petersen-Felix S, et al. *Swiss Med Weekly.* 2002;132:273-278; Woolf CJ. *Nature.* 1983;306:686-688; Woolf CJ, et al. *Nature.* 1992;355:75-78.

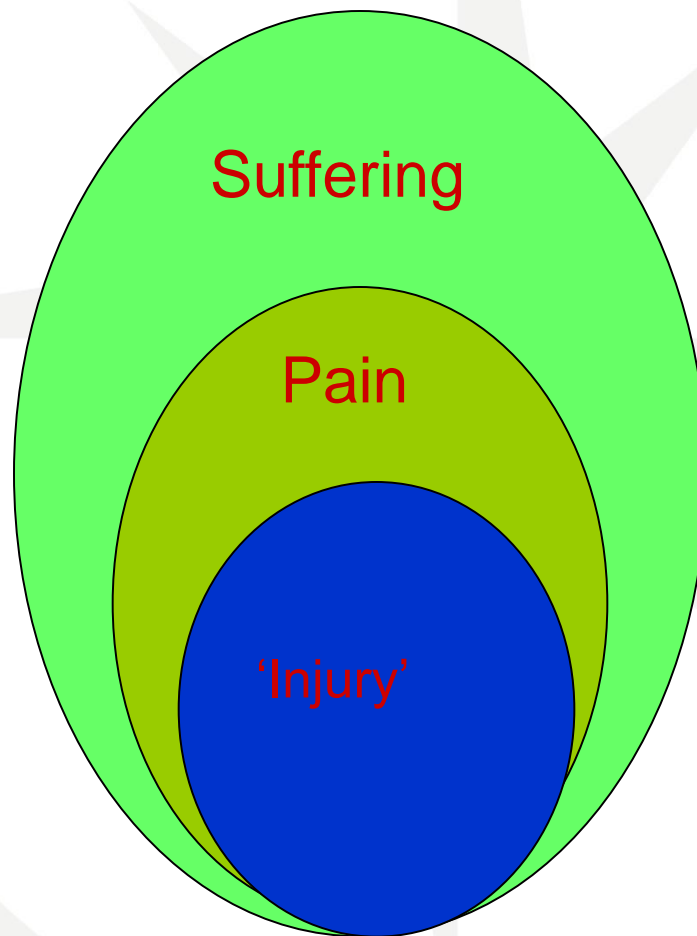
Pain Switchboard



Patient with Pain



Patient with Pain



“...When touched with a feeling of pain, the ordinary uninstructed person sorrows, grieves, and laments, beats his breast, becomes distraught.

So he feels **two pains, physical and mental.**

Just as if they were to shoot a man with an arrow and, right afterward, were to shoot him with another one, so that he would feel the pains of two arrows...”

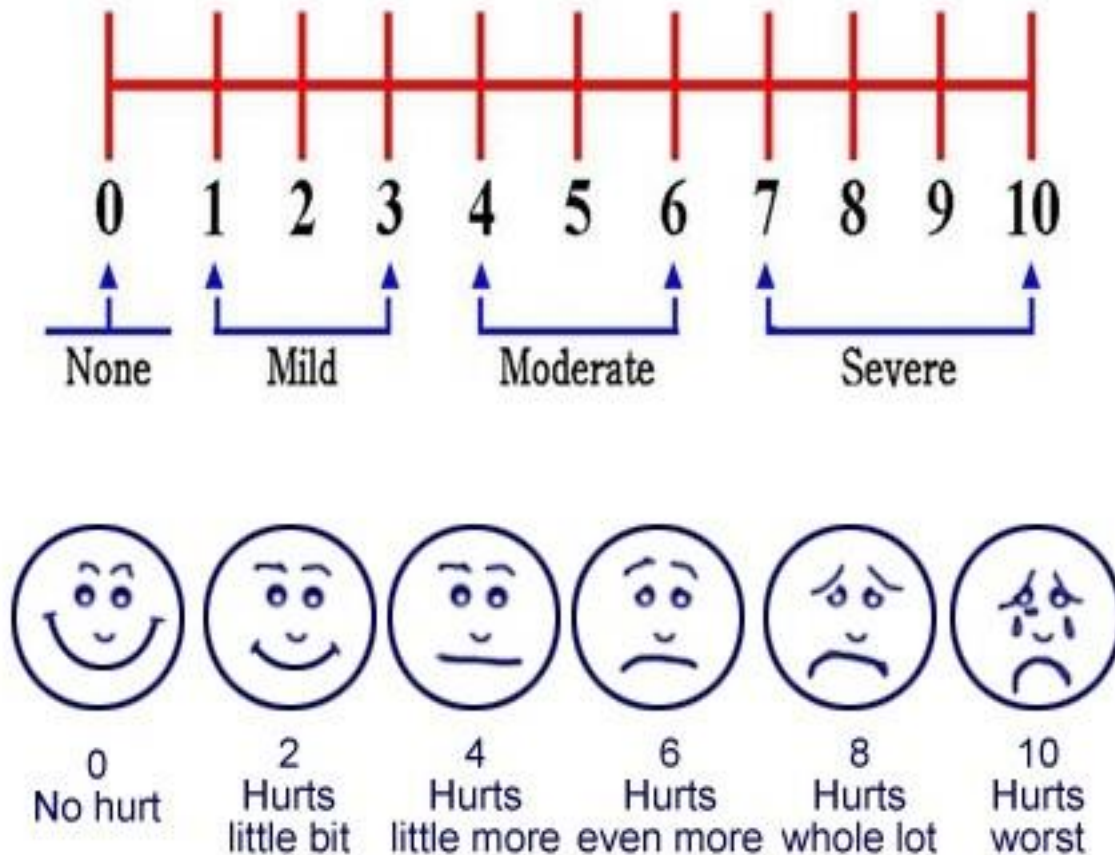
The Buddha

Chronic Pain Syndrome

- Pain > 6 months
- Depression, anxiety, anger, fear
- Restriction in daily activities
- Excessive use of medications and medical services
- Multiple, *non-productive* tests, treatment, surgeries
- No clear relationship to organic disorder

Pain Assessment Scale: Clinical definition of pain: “Whatever the patient says it is...

unless proven otherwise”



Reasonable Goals of Pain Management: Enhance Quality of Life!!

- Maintain function
- Improve function
- Reduce discomfort by 50%

Pharmacologic Non-Opioid

- NSAID'S, COX 2S
- Tricyclics, SNRI'S
- Anticonvulsants
- Muscle Relaxants— (**AVOID**
SOMA/carisoprodol)
- Topicals

Treating Chronic Pain with Opioids

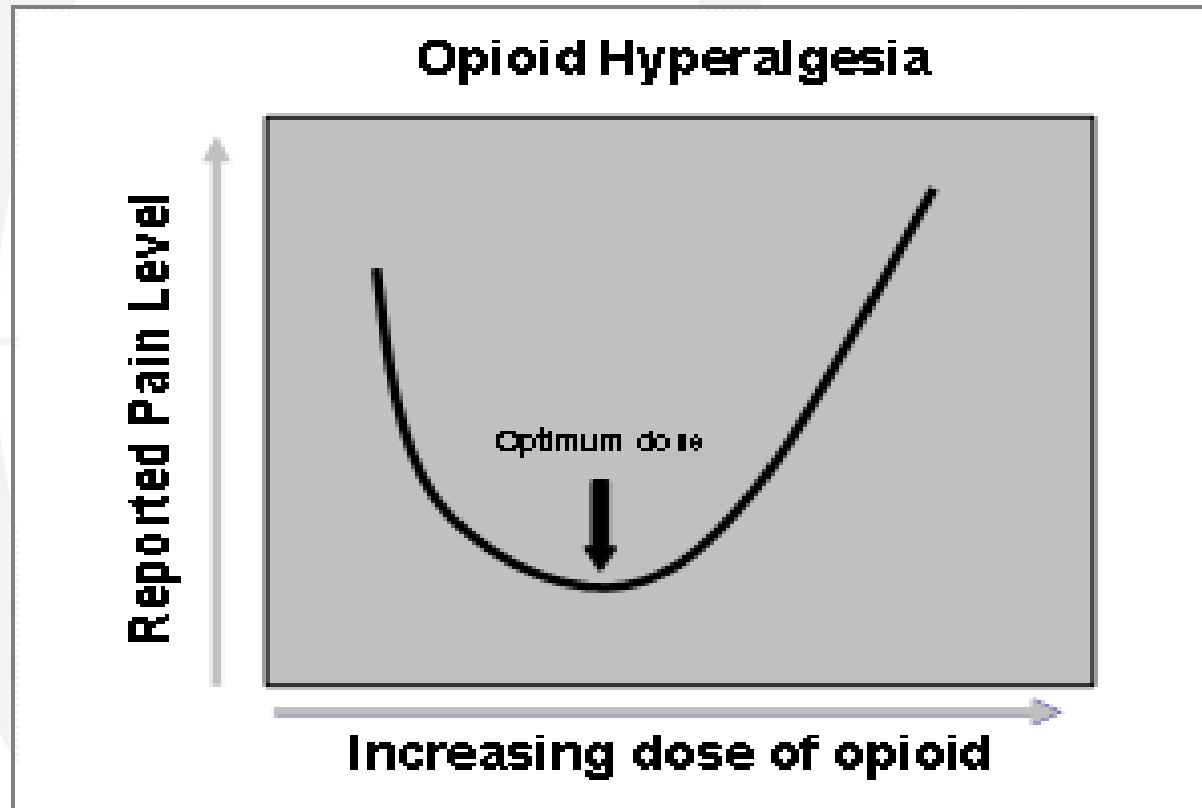
- Clinical Trial
- Ongoing Assessment
- Need exit strategy

Problems with Opioids

- Side Effects
- Tolerance and physical dependence
- Loss of function
- Perceive emotional pain as physical pain (chemical copers)
- Hyperalgesia

NEJM, Ballantyne & Mao

Nov 2003





OxyContin 80mg

DEA

New Oxycontin® Formulation to Mitigate Abuse April 2010



Oxycodone



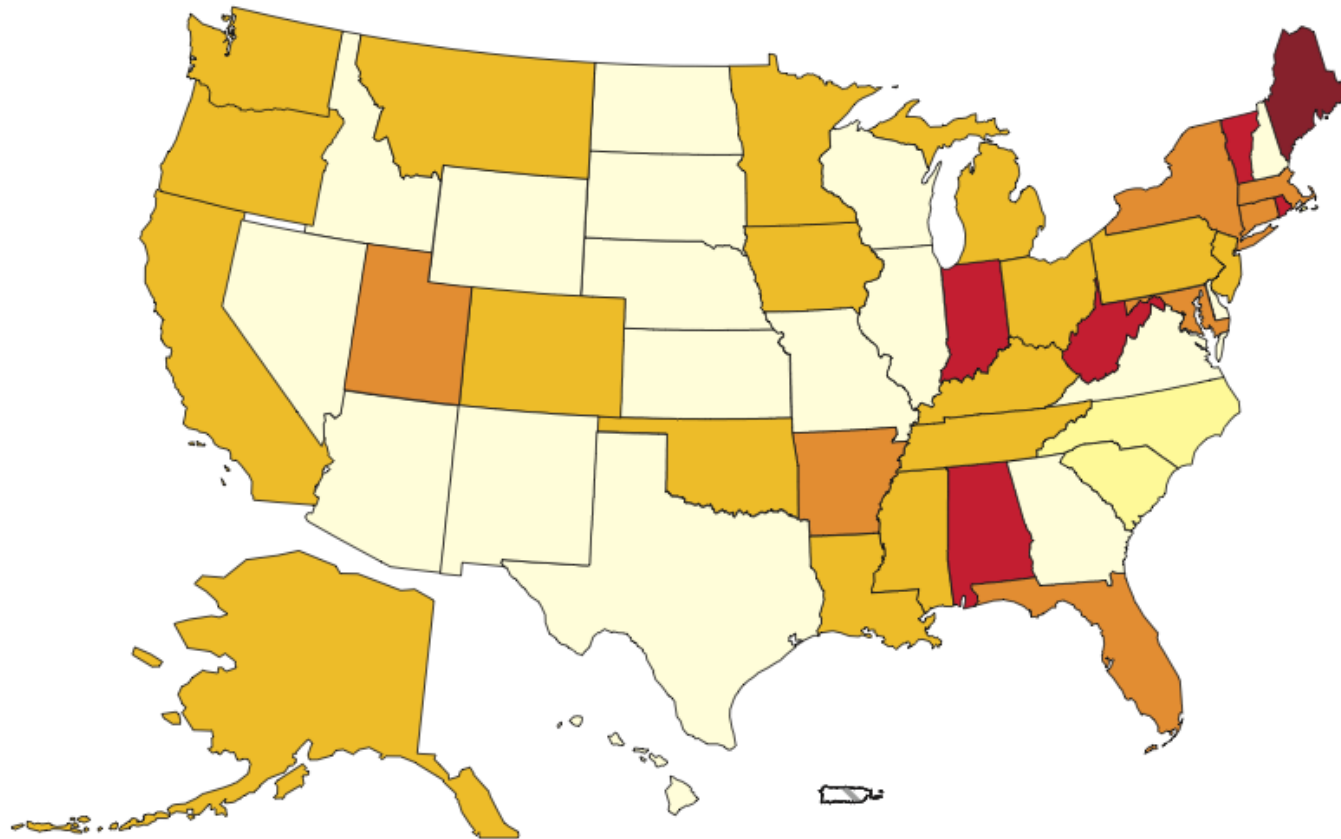
So, by 2012:
1. Freeze Oxy or
2. Opana®



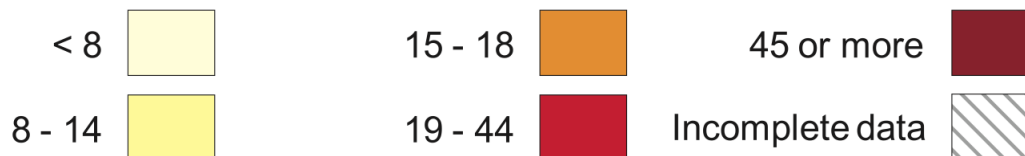
Oxymorphone

LVRCSM
LAS VEGAS RECOVERY CENTER

Primary non-heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)

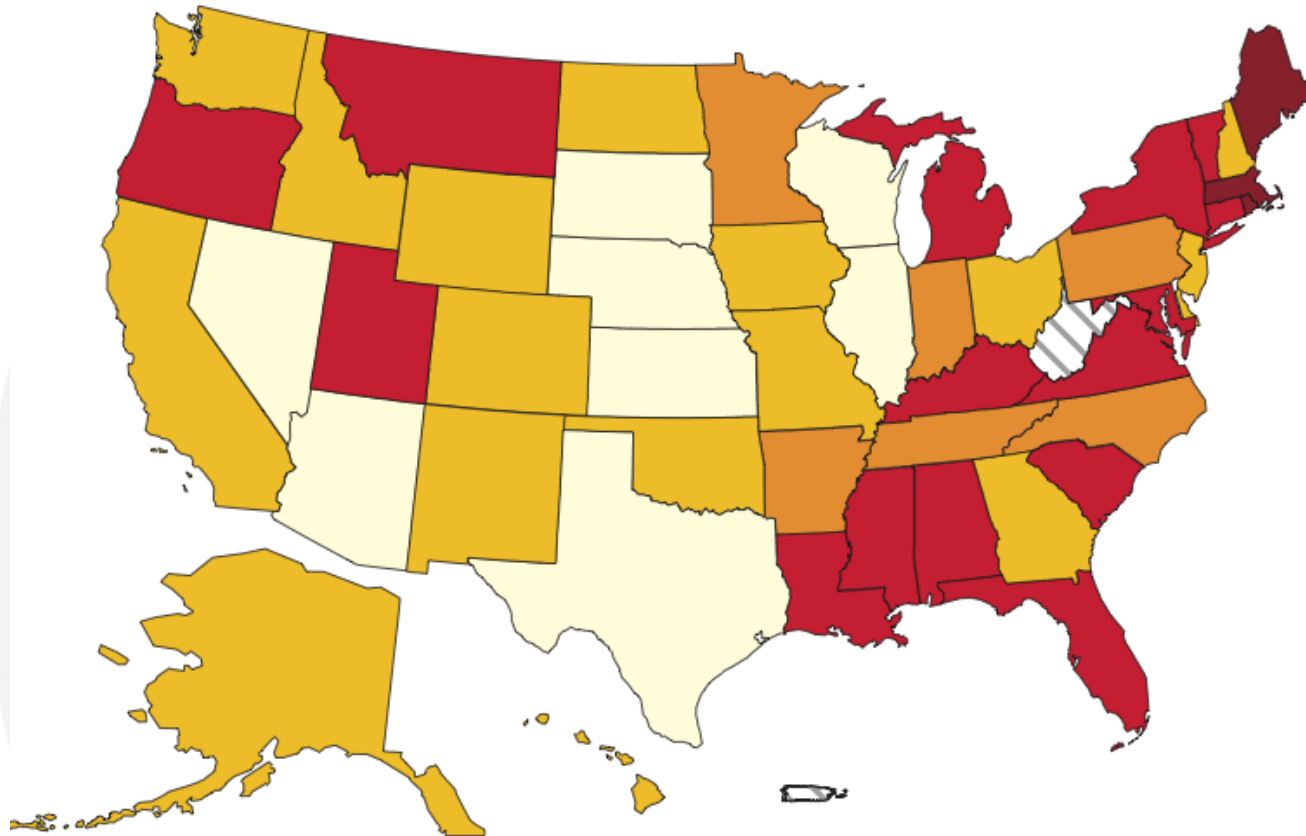


1999
(range 1 - 50)

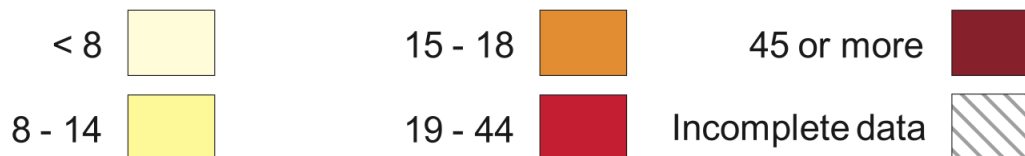


SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.

Primary non-heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)

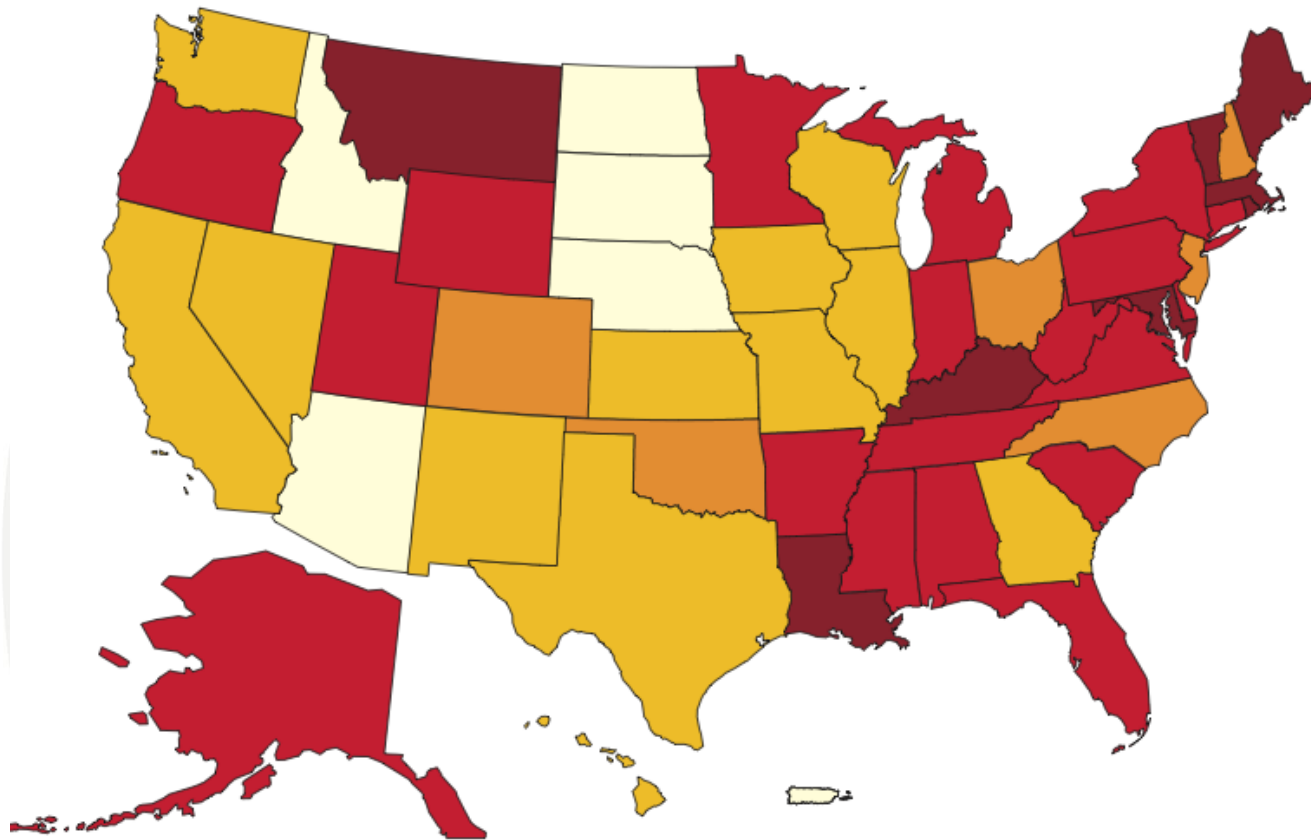


2001
(range 1 – 71)



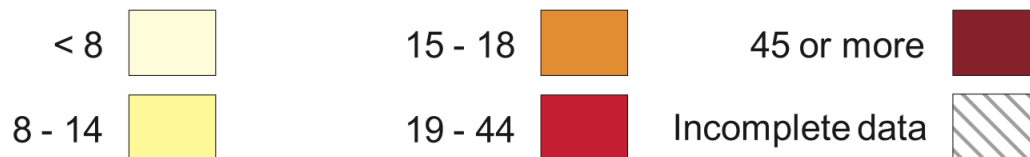
SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.

Primary non-heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)



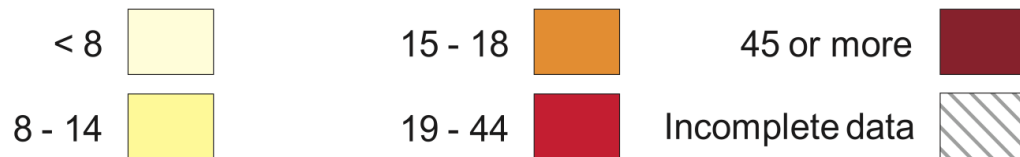
2003

(range 2 – 139)



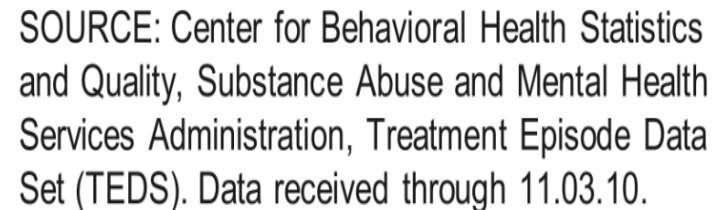
SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.

(range 0 – 214)

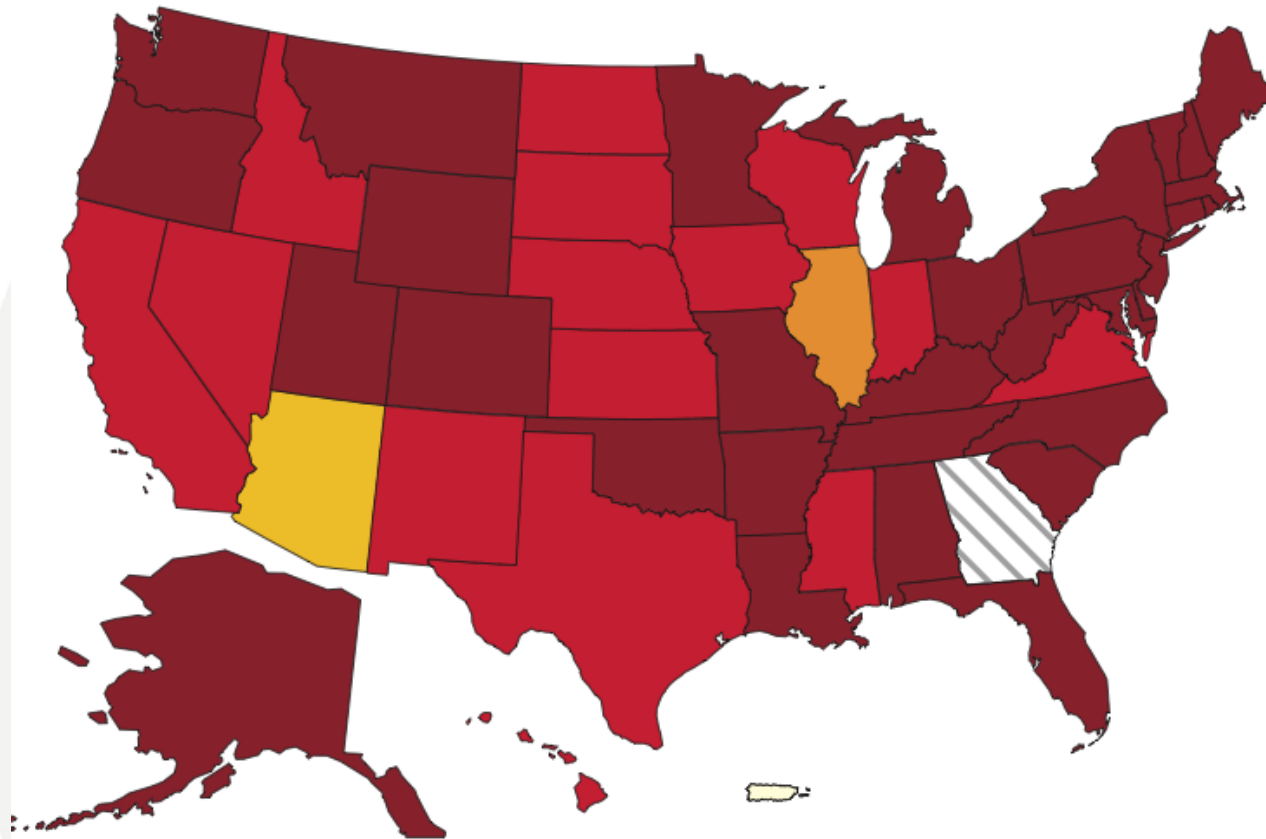


SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.

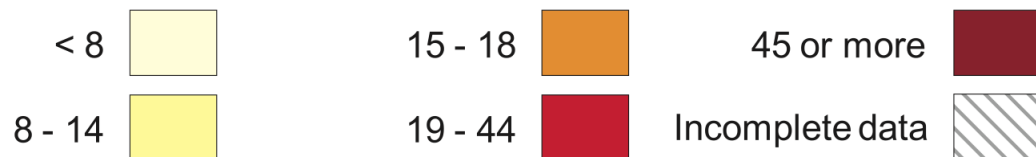
(range 1 – 340)



Primary non-heroin opiates/synthetics admission rates, by State (per 100,000 population aged 12 and over)



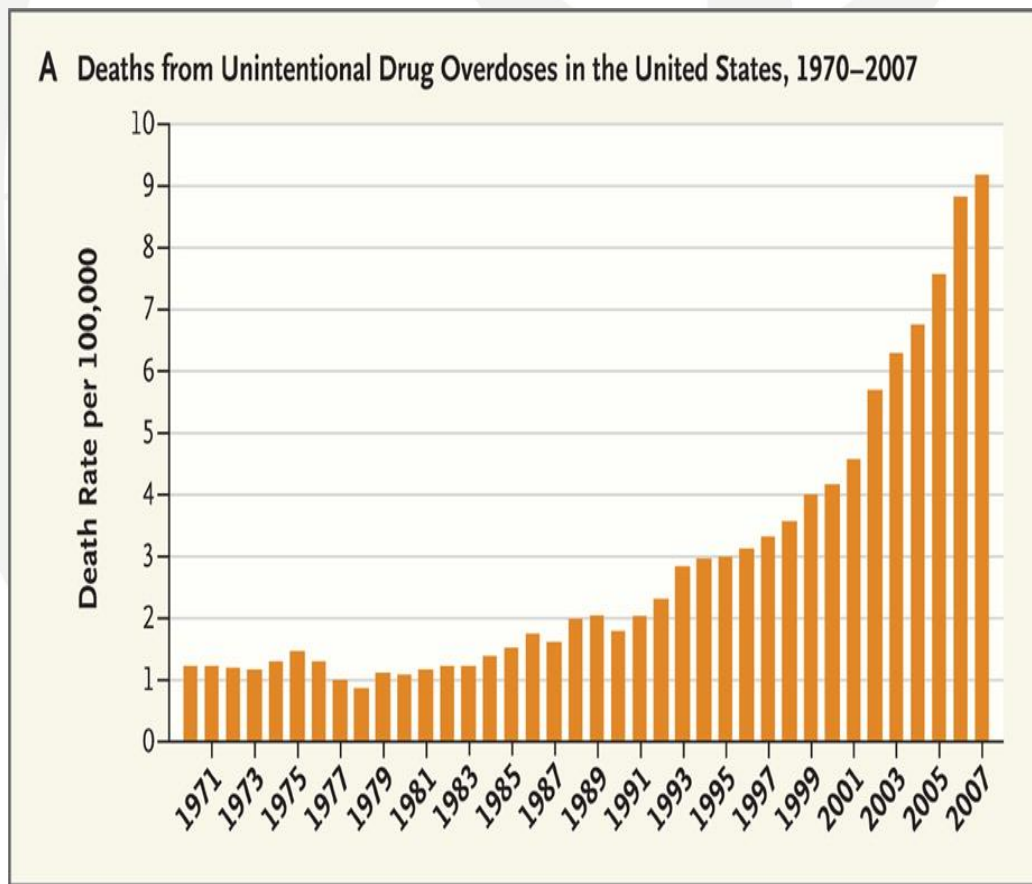
2009
(range 1 – 379)



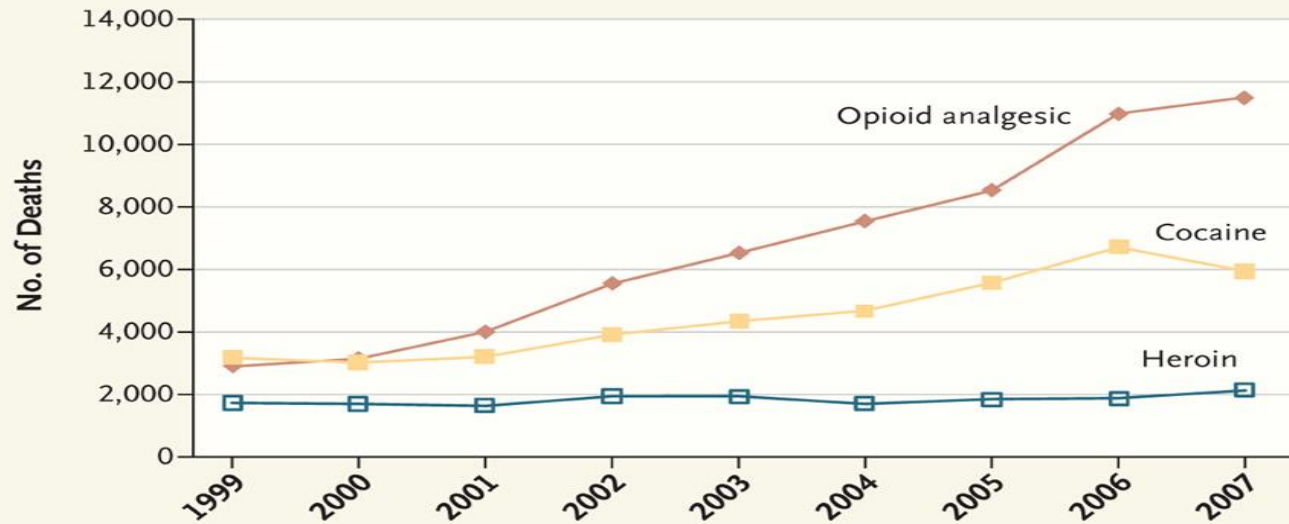
SOURCE: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS). Data received through 11.03.10.

U.S. Rates of Death from Unintentional Drug Overdoses

Okie S. N Engl J Med 2010;363:1981-1985.



B Deaths from Unintentional Drug Overdoses in the United States According to Major Type of Drug, 1999–2007

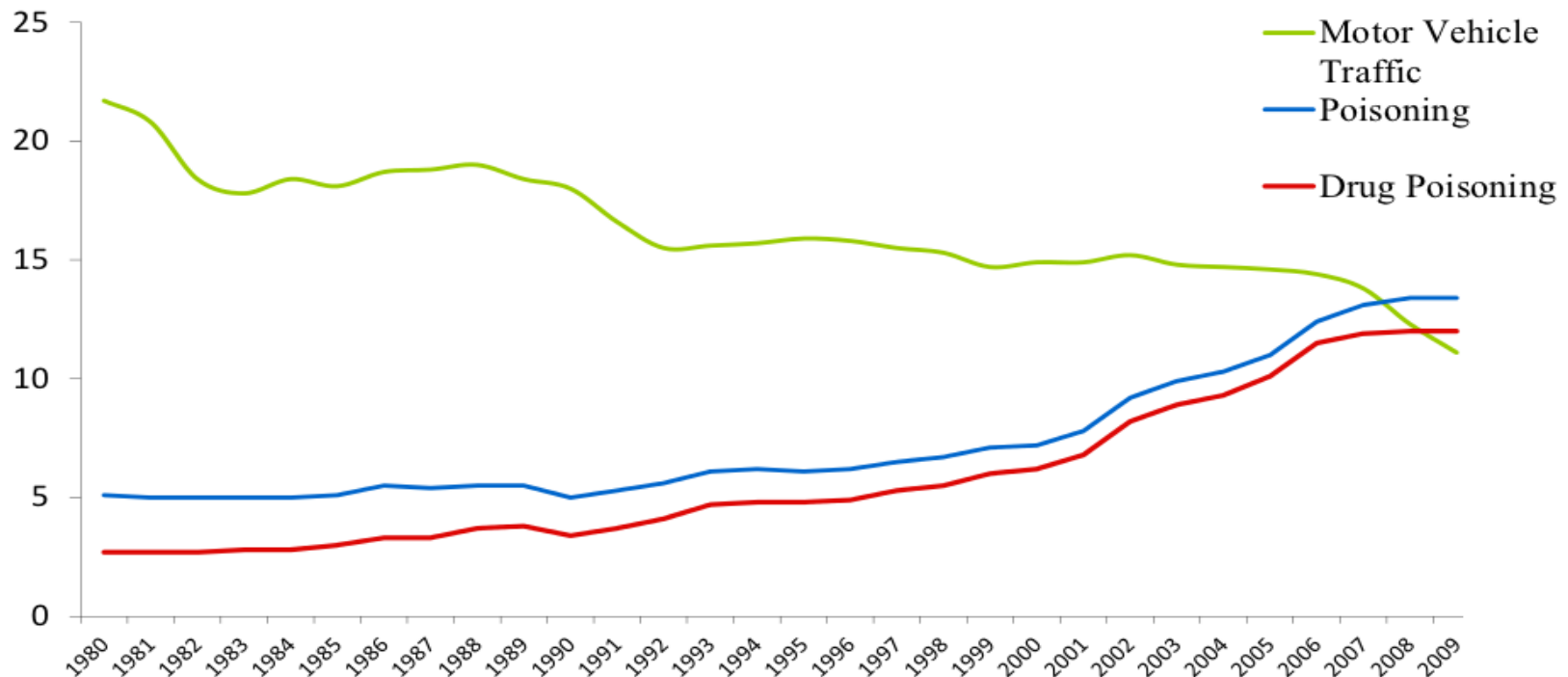


U.S. Numbers of Deaths, According to Major Type of Drug.

Okie S. N Engl J Med 2010;363:1981-1985.

Prescription Drug Overdose and Abuse: A Growing Problem

Motor vehicle traffic, poisoning, and drug poisoning death rates, 1980-2009



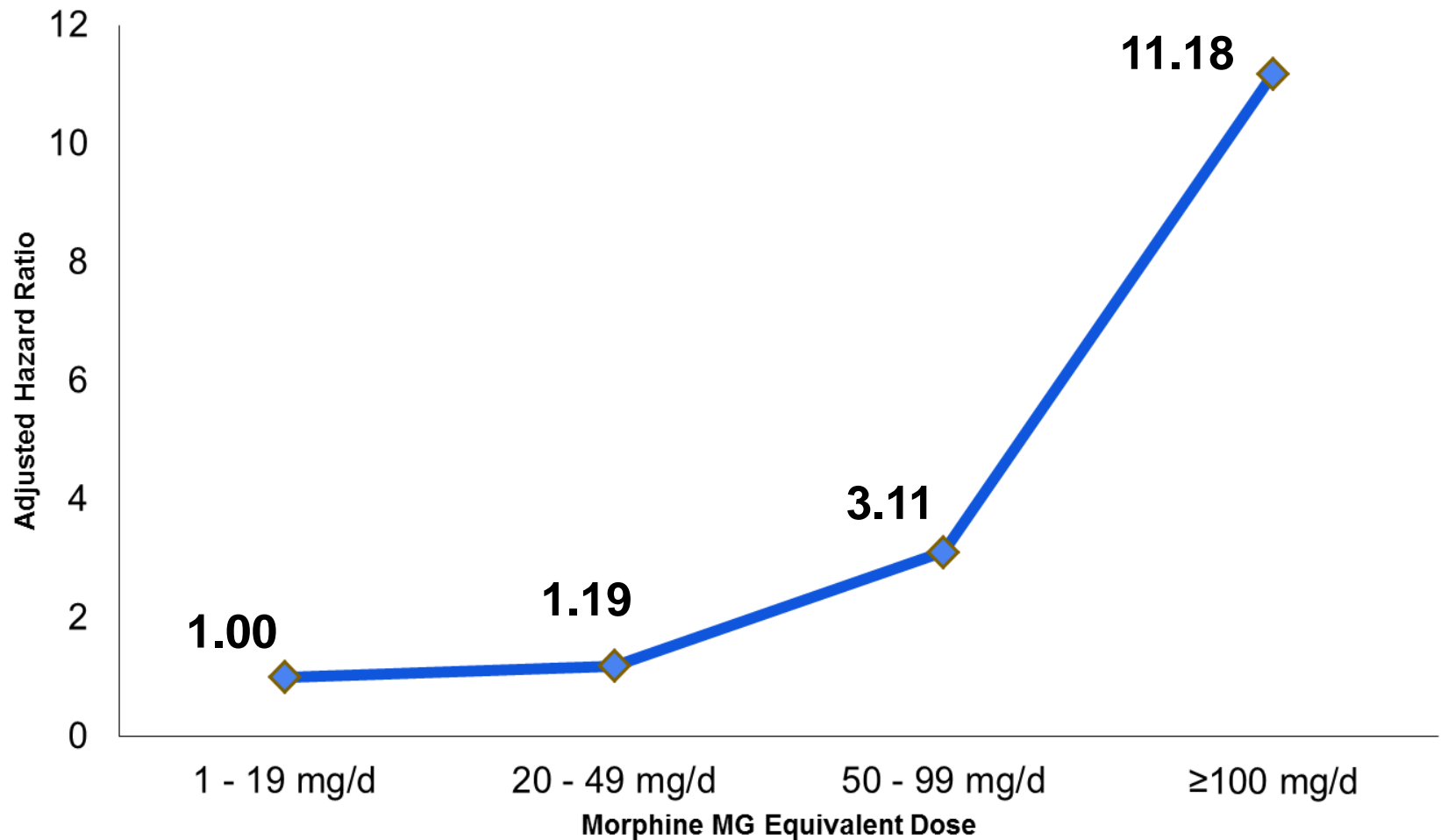
Source: National Center for Health Statistics, Drug Poisoning Deaths in the United States Databrief, 2011.

Dunn, et al. 2010

9940 patients; 1997-2005

Results:

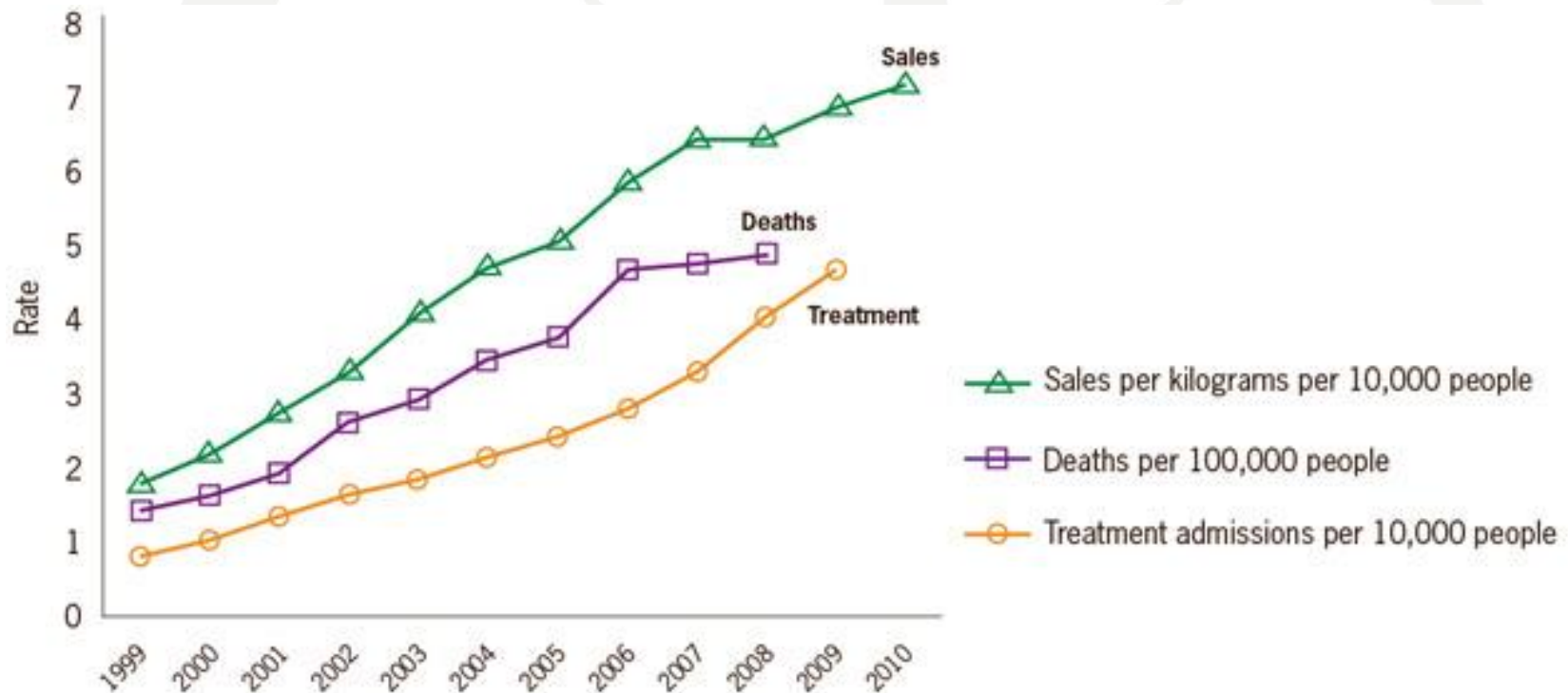
<u>Morphine Dose</u>	<u>Hazard Ratio of Serious Overdose</u>
None	0.19
1 - <20 mg /day	1.00
20 - <50 mg/day	1.19
50 - <100 mg/day	3.11
100 + mg/day	11.18



* Overdose defined as death, hospitalization, unconsciousness, or respiratory failure.

Dunn et al. Opioid prescriptions for chronic pain and overdose. *Ann Int Med* 2010;152:85-92.

Rates of prescription painkiller sales, deaths and substance abuse treatment admissions (1999-2010)



SOURCES: National Vital Statistics System, 1999-2008; Automation of Reports and Consolidated Orders System (ARCOS) of the Drug Enforcement Administration (DEA), 1999-2010; Treatment Episode Data Set, 1999-2009

Industry-influenced “Education” on Opioids for Chronic Non-Cancer Pain Emphasizes:

- Physicians are needlessly allowing patients to suffer because of “opiophobia.”
- Opioids are safe and effective for chronic pain.
- Opioid therapy can be easily discontinued.
- Opioid addiction is rare in pain patients.

“Only four cases of addiction among 11,882 patients treated with opioids.”

Porter J, Jick H. *Addiction rare in patients treated with narcotics*. N Engl J Med. 1980 Jan 10;302(2):123

Cited 693 times (Google Scholar)

N Engl J Med. 1980 Jan 10;302(2):123.

ADDICTION RARE IN PATIENTS TREATED WITH NARCOTICS

To the Editor: Recently, we examined our current files to determine the incidence of narcotic addiction in 39,946 hospitalized medical patients¹ who were monitored consecutively. Although there were 11,882 patients who received at least one narcotic preparation, there were only four cases of reasonably well documented addiction in patients who had no history of addiction. The addiction was considered major in only one instance. The drugs implicated were meperidine in two patients,² Percodan in one, and hydromorphone in one. We conclude that despite widespread use of narcotic drugs in hospitals, the development of addiction is rare in medical patients with no history of addiction.

JANE PORTER

HERSHEL JICK, M.D.

Boston Collaborative Drug
Surveillance Program

Waltham, MA 02154

Boston University Medical Center

1. Jick H, Miettinen OS, Shapiro S, Lewis GP, Siskind Y, Slone D. Comprehensive drug surveillance. JAMA. 1970; 213:1455-60.
2. Miller RR, Jick H. Clinical effects of meperidine in hospitalized medical patients. J Clin Pharmacol. 1978; 18:180-8.

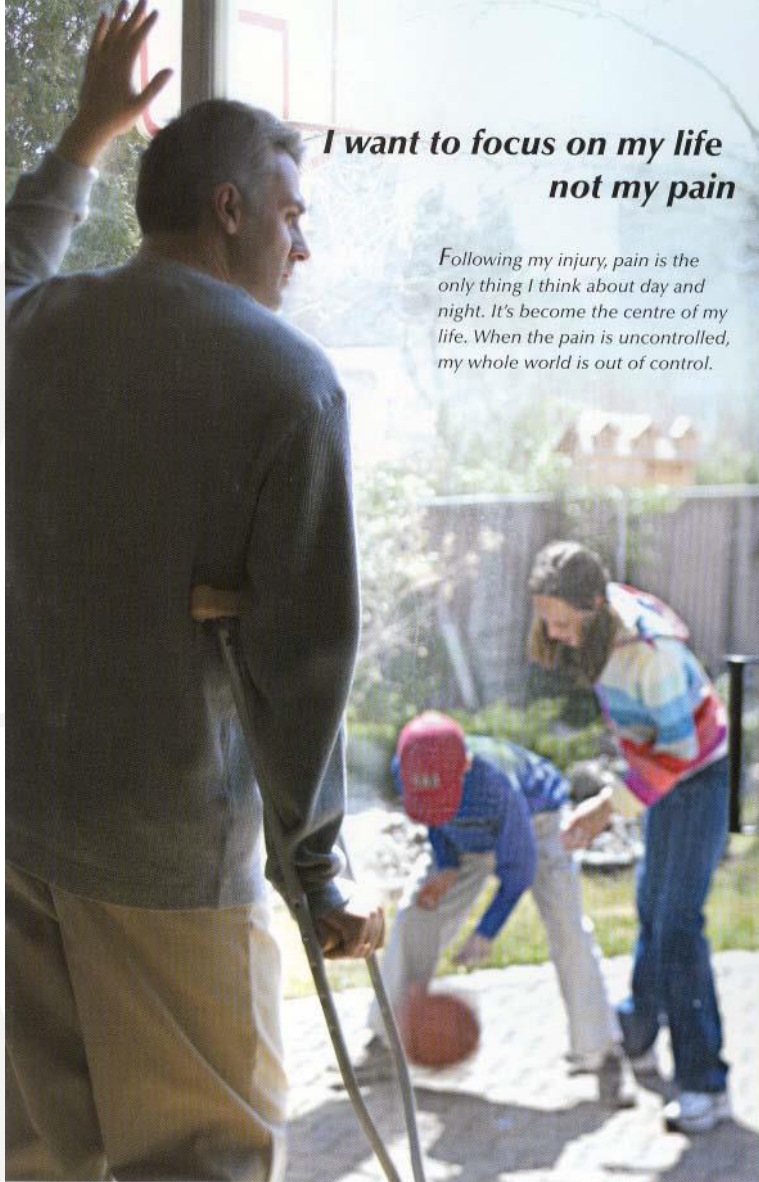
Total Sales & Prescriptions for OxyContin (1996-2002)

Table 2: Total OxyContin Sales and Prescriptions for 1996 through 2002 with Percentage Increases from Year to Year

Year	Sales	Percentage increase	Number of prescriptions	Percentage increase
1996	\$44,790,000	N/A	316,786	N/A
1997	125,464,000	180	924,375	192
1998	286,486,000	128	1,910,944	107
1999	555,239,000	94	3,504,827	83
2000	981,643,000	77	5,932,981	69
2001	1,354,717,000	38	7,183,327	21
2002	1,536,816,000	13	7,234,204	7

Source: United States General Accounting Office: Dec. 2003, "OxyContin Abuse and Diversion and Efforts to Address the Problem."

2013 – US sales of Rx painkillers = \$12 Billion (IMS Health)



I want to focus on my life not my pain

Following my injury, pain is the only thing I think about day and night. It's become the centre of my life. When the pain is uncontrolled, my whole world is out of control.

- Rapid onset of analgesia within 46 minutes^{††}
- Full 12 hours of pain relief^{††,‡}
- Initiate with 10 mg^{†‡}



Indicated for the relief of moderate to severe pain requiring the continuous use of an opioid analgesic preparation for several days or more. Side effects are similar to other opioid analgesics; the most frequently observed are constipation, nausea and somnolence. Dosage limitations may be imposed by adverse effects if they occur. Please refer to prescribing information.

Warning: Opioid analgesics should be prescribed and handled with the degree of caution appropriate to the use of a drug with abuse potential. OxyContin® 80 mg tablets are for use in opioid tolerant patients only. There is potential for fatal respiratory depression in patients not previously exposed to similar opioid doses. OxyContin® tablets should be swallowed whole and should not be broken, chewed or crushed since this can lead to rapid release and absorption of a potentially fatal dose of oxycodone.

[†] For moderate to severe pain.

^{††} Median time to onset of analgesia after single dose OxyContin® 15 mg (N=31/180) and OxyContin® 30 mg (N=30/180) was 41 minutes and 46 minutes, respectively (N=61/180) (P<0.05) in patients following abdominal or gynecologic surgery in groups of 30 each.

[‡] Less frequent dosing compared to short-acting opioid analgesics.

^{†††} The usual initial adult dose of OxyContin® for patients who have not previously received opioid analgesics is 10 or 20 mg every 12 hours. Dose adjustments can be made every 24 hours with no ceiling dose.

Product monograph available on request.

OxyContin® q12h
Controlled release oxycodone tablets

*For pain lasting several days, weeks, months or more**

Purdue Pharma Inc.
Serving Patients of a Community
Purdue Pharma
Pittsford, Ontario L1W 2H8

Marked
R&D PAAB

www.painCare.ca



LVRCSM
VEGAS RECOVERY CENTER

FDA used to permit drug manufacturers to advertise opioids as safe and effective for chronic pain.

FREEDOM FROM PAIN!

**Extra strength pain relief
free of extra prescribing
restrictions.**

- Telephone prescribing in most states
- Up to five refills in 6 months
- No triplicate Rx required

Excellent patient acceptance.
In 12 years of clinical experience, nausea, sedation and constipation have rarely been reported.¹

COMPARATIVE PHARMACOLOGY OF TWO ANALGESICS					
	Constipation	Respiratory Depression	Sedation	Nausea	Physical Dependence
HYDROCODONE		X			X
OXYCODONE	XX	XX	XX	XX	XX

Blank space indicates that no such activity has been reported. Table adapted from Facts and Comparisons 1991 and Cotalano RB. The medical approach to management of pain caused by cancer. Semin Oncol 1975; 2: 379-92 and Fleuler JB, et al. The chronic pain syndrome: misconceptions and management. Ann Intern Med. 1980; 93: 98-96.

The heritage of VICODIN[®],* over a billion doses prescribed.²

- VICODIN ES provides greater central and peripheral action than other hydrocodone/acetaminophen combinations.
- Four to six hours of extra strength pain relief from a single dose
- The 14th most frequently prescribed medication in America²



(hydrocodone bitartrate 7.5mg (Warning: May be habit forming) and acetaminophen 750mg)

Tablet for tablet, the most potent analgesic you can phone in.

* (hydrocodone bitartrate 5 mg (Warning: May be habit forming) and acetaminophen 500mg)
1. Data on file, Knoll Pharmaceuticals
2. Standard industry new prescription audit

Please see brief summary of prescribing information on adjacent page.

Maintain control of your patient's therapy.



Rx Specify
Do not substitute



(hydrocodone bitartrate 7.5mg (Warning: May be habit forming) and acetaminophen 750mg)

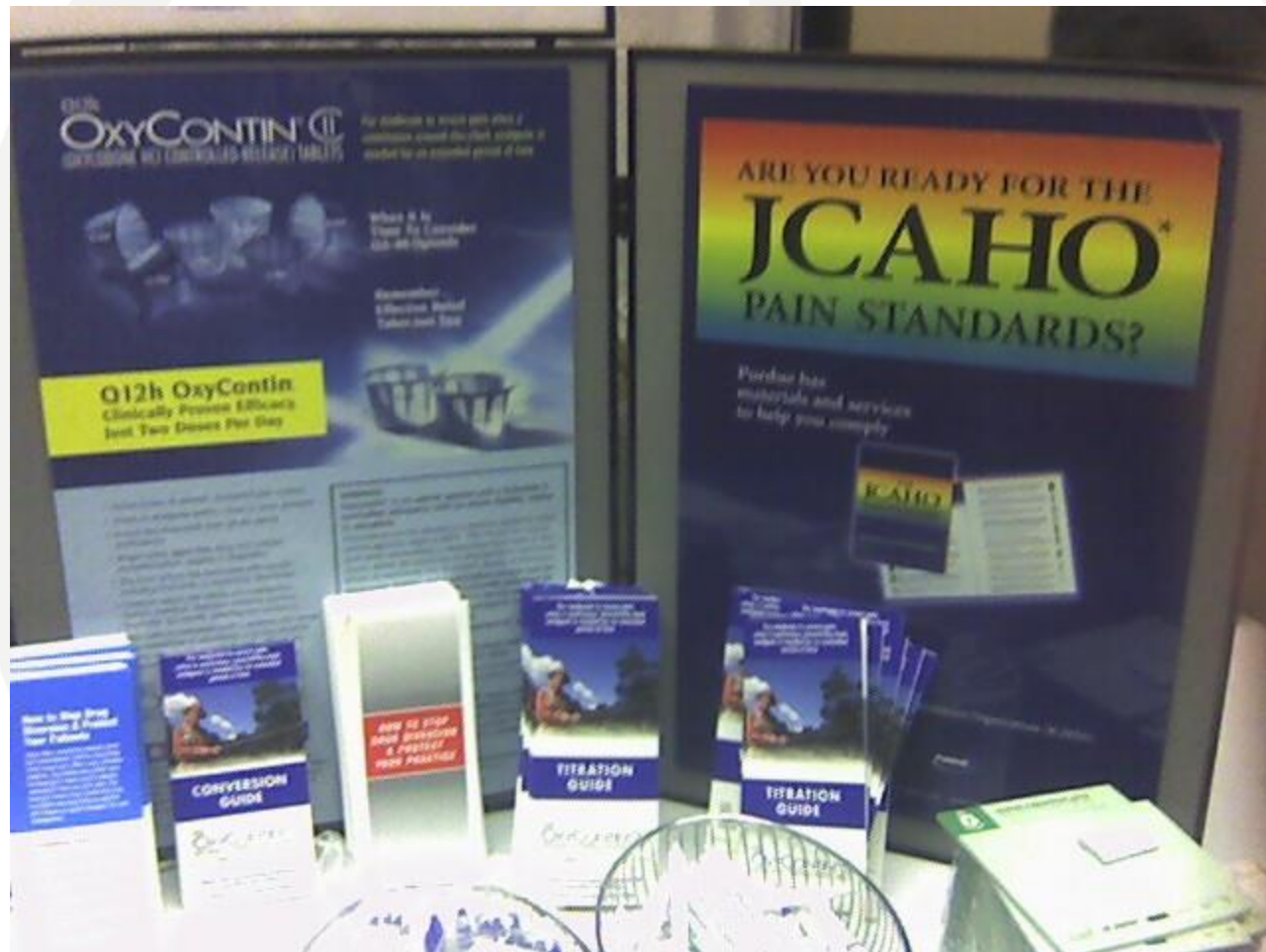
It's your prescription – not a suggestion.

INDICATIONS AND USAGE: For the relief of moderate to moderately severe pain. **CONTRAINDICATIONS:** Hypersensitivity to acetaminophen or hydrocodone. **WARNINGS:** Respiratory Depression: At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression. Head Injury and Increased Intracranial Pressure: The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a pre-existing increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries. **Acute Abdominal Conditions:** The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions. **PRECAUTIONS:** Special Risk Patients: VICODIN/VICODIN ES tablets should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture. **Cough Reflex:** Hydrocodone suppresses the cough reflex; as with all narcotics, caution should be exercised when VICODIN/VICODIN ES tablets are used postoperatively and in patients with pulmonary disease. **Drug Interactions:** Patients receiving other narcotic analgesics, antipsychotics, anticholinergic agents, or other CNS depressants (including alcohol) concomitantly with VICODIN/VICODIN ES tablets may exhibit an additive CNS depression. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus. **Usage in Pregnancy:** **Teratogenic Effects:** Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN/VICODIN ES tablets should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. **Neonatal/Neonatal Effects:** Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The withdrawal signs include irritability and excessive crying, tremors, hyperactive reflexes, increased respiratory rate, increased stool, sneezing, yawning, and fever. **Labor and Delivery:** Administration of VICODIN/VICODIN ES tablets to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used. **Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk and because of the potential for serious adverse reactions in nursing infants from VICODIN/VICODIN ES tablets, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother. **Pediatric Use:** Safety and effectiveness in children have not been established. **ADVERSE REACTIONS:** The most frequently observed adverse reactions include light-headedness, dizziness, sedation, nausea and vomiting. These effects seem to be more pronounced in ambulatory than in nonambulatory patients and some of these adverse reactions may be alleviated if the patient lies down. Other adverse reactions include: **Central Nervous System:** Drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, psychic dependence and mood changes. **Gastrointestinal System:** The antiemetic phenothiazines are useful in suppressing the nausea and vomiting which may occur (see above). However, some phenothiazines have been shown to be anticholinergic and to increase the amount of narcotic required to produce pain relief, while other phenothiazines reduce the amount of narcotic required to produce a given level of analgesia. Prolonged administration of VICODIN/VICODIN ES tablets may produce constipation. **Genitourinary System:** Urinary spasm, spasm of vesical sphincter and urinary retention have been reported. **Respiratory Depression:** Hydrocodone bitartrate may produce dose-related respiratory depression by acting directly on the brain stem respiratory center. Hydrocodone also affects the center that controls respiratory rhythm, and may produce irregular and periodic breathing. If significant respiratory depression occurs, it may be antagonized by the use of naloxone hydrochloride. Apply other supportive measures when indicated. **DRUG ABUSE AND DEPENDENCE:** VICODIN/VICODIN ES tablets are subject to the Federal Controlled Substance Act (Schedule III). **Psychic Dependence, Physical Dependence, and Tolerance:** and tolerance may develop upon repeated administration of narcotics; therefore, VICODIN/VICODIN ES tablets should be prescribed and administered with caution. **OVERDOSEAGE:** **Acetaminophen Signs and Symptoms:** In acute acetaminophen overdose, dose-dependent, potentially fatal hepatic necrosis is the most serious adverse effect. Renal tubular necrosis, hypoglycemia, and thrombocytopenia may also occur. Early symptoms following a potentially hepatotoxic overdose may include: nausea, vomiting, diaphoresis, and general malaise. Clinical and laboratory evidence of hepatic toxicity may not be apparent until 48 to 72 hours post-ingestion. **Hydrocodone Signs and Symptoms:** Serious overdose with hydrocodone is characterized by respiratory depression (decrease in respiratory rate and/or tidal volume, Cheyne-Stokes respiration, cyanosis), extreme somnolence progressing to stupor or coma, skeletal muscle flaccidity, cold and clammy skin, and sometimes bradycardia and hypotension. In severe overdose, apnea, circulatory collapse, cardiac arrest and death may occur.

Knoll Pharmaceuticals
A Unit of BASF KAF Corporation
Whippany, New Jersey 07981

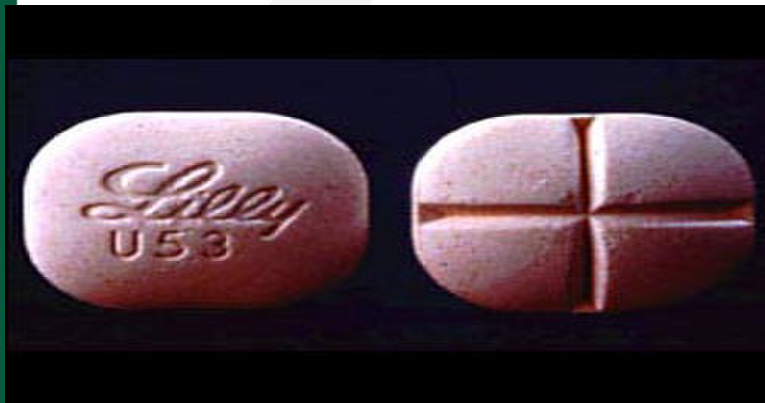
© 1992, BASF KAF Corporation V30574-92 Printed in USA BASF Group

Photo taken at the 7th International Conference on Pain and Chemical Dependency, June 2007



Methadone (Dolophine, Methadose)

Leading Cause of Rx OD Deaths 2010-2011



Heroin: making a big comeback in 2010 on!



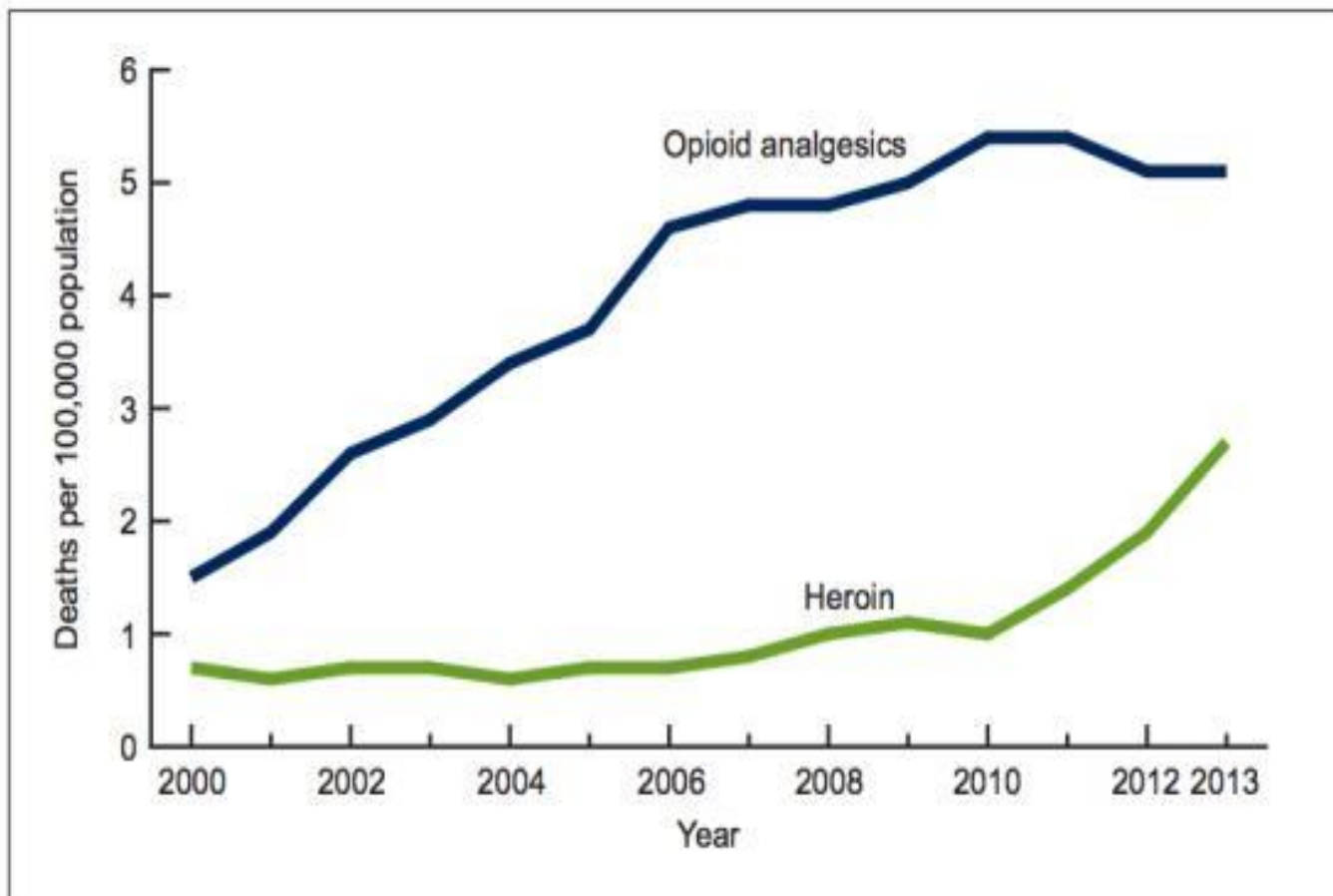
Batches of Heroin can be as different as night and day.



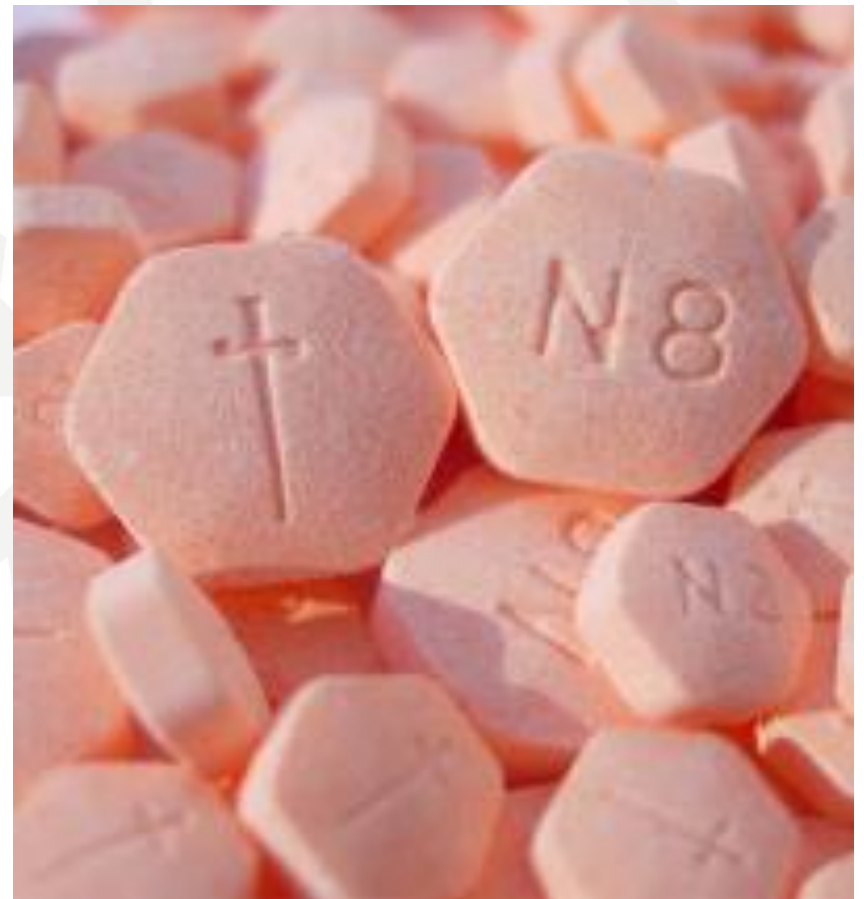
**Texas “Cheese Heroin”:
Black Tar Mixed with Tylenol PM**

Black Tar heroin

Figure 1. Age-adjusted rates for drug-poisoning deaths, by type of drug: United States, 2000–2013



Suboxone tablets (RB)





Handheld Device That Delivers Opioid Overdose Treatment Approved by FDA

ASAM Short Definition of Addiction

Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry.

Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations.

This is reflected in an individual **pathologically pursuing reward and/or relief** by substance use and other behaviors...

This is a false dichotomy

Aberrant drug use behaviors are common in pain patients

Pain Patients

35% met DSM V criteria for addiction²

63% admitted to using opioids for purposes other than pain¹



92% of opioid OD decedents were prescribed opioids for chronic pain.

“Drug Abusers”

1. Fleming MF, Balousek SL, Klessig CL, Mundt MP, Brown DD. Substance Use Disorders in a Primary Care Sample Receiving Daily Opioid Therapy. J Pain 2007;8:573-582.

2. Boscarino JA, Rukstalis MR, Hoffman SN, et al. Prevalence of prescription opioid-use disorder among chronic pain patients: comparison of the DSM-5 vs. DSM-4 diagnostic criteria. J Addict Dis. 2011;30:185-194.

3. Johnson EM, Lanier WA, Merrill RM, et al. Unintentional Prescription Opioid-Related Overdose Deaths: Description of Decedents by Next of Kin or Best Contact, Utah, 2008-2009. J Gen Intern Med. 2012 Oct 16.

Emotional Intensifiers

- Guilt
- Anger – Resentments
- Loneliness
- Helplessness
- Fear

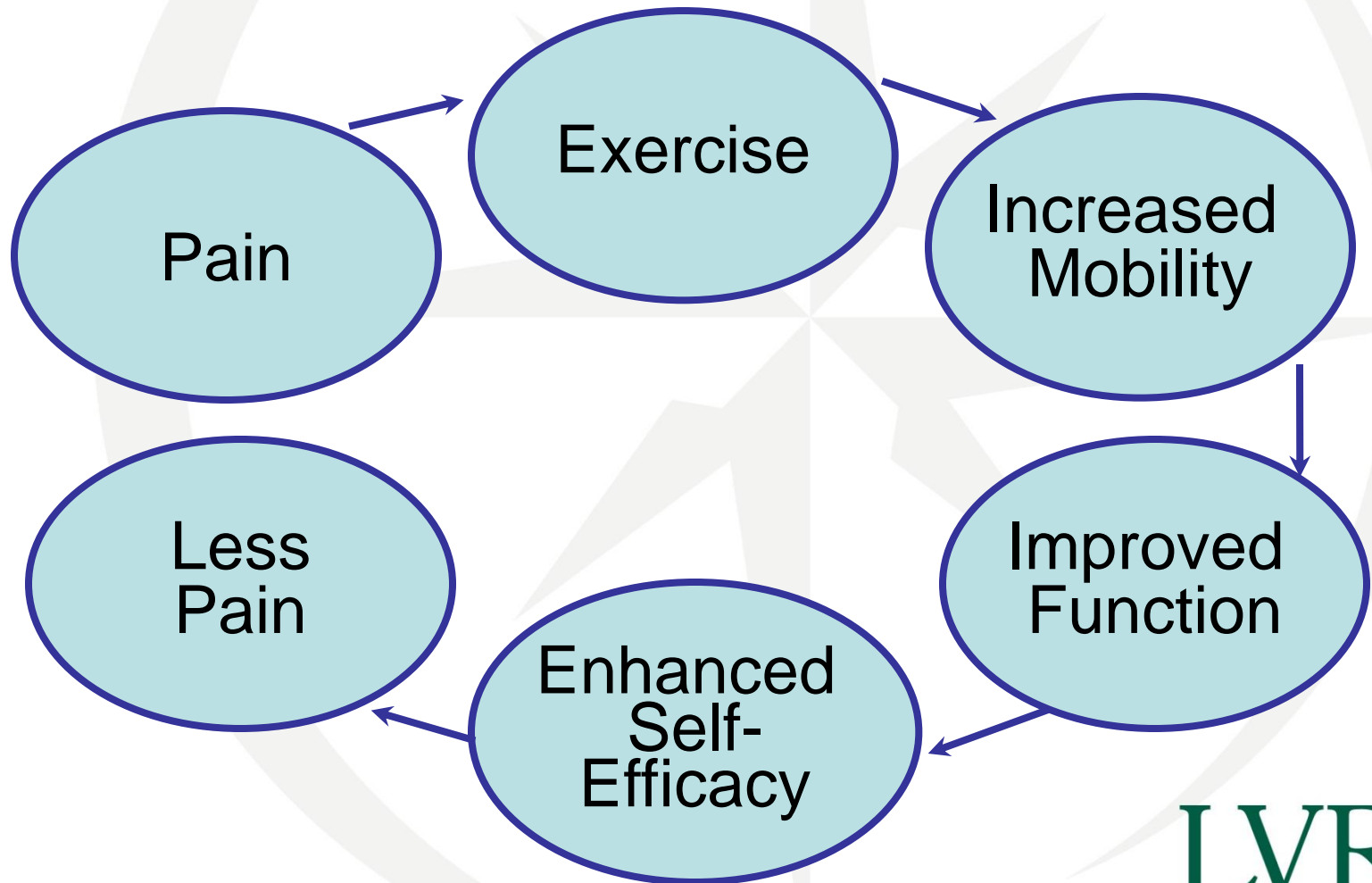
Cycle of Uncontrolled Pain and Fear



Ways to reduce pain intensity

- Cognitive/Behavioral Therapy (CBT)
- DBT/ACT
- Attention/Distraction
- Control/Placebo effect
- Fear reduction

Reversal of Cycle of Fear and Pain



Pain Pearls

- Conditioning Increases Pain.
- Pain Patients Are A Pain.
- Secondary Gain Prevents Getting Well.

Pain Recovery – Develop Balance

- Mental
- Emotional
- Physical
- Spiritual

RESULTING CHANGES

- Relationships
- Positive actions and behaviors

Non-Medication Treatments at LVRC

- Exercise – Physical Therapy
- Chiropractic Treatments
- Therapeutic Massage
- Reiki
- Acupuncture
- Nutrition
- Individual + group therapy
- Mindfulness-Based Stress Reduction (Kabat-Zinn)
- Yoga - Chi Gong

QUESTIONS?

Mel Pohl, MD, FASAM

702-515-1373

mpohl@centralrecovery.com

thepainantidotebook.com

www.supportPROP.org

www.likemindeddocs.com

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THANK YOU

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adaywithoutpain.com